

Translation

PATENT COOPERATION TREATY

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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 47275/A27/DR	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/009374	International filing date (day/month/year) 23 August 2003 (23.08.2003)	Priority date (day/month/year) 31 August 2002 (31.08.2002)
International Patent Classification (IPC) or national classification and IPC F24F 5/00, F25D 3/08, A41D 13/005		
Applicant ENTRAK ENERGIE- UND ANTRIEBSTECHNIK GMBH & CO. KG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 11 December 2003 (11.12.2003)	Date of completion of this report 01 June 2004 (01.06.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/009374

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages _____ 1-15 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____ 1-33 _____, filed with the letter of _____ 17 February 2004 (17.02.2004)
- ☒ the drawings:
pages _____ 1/3-3/3 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/09374

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1-33	YES
	Claims		NO
Inventive step (IS)	Claims	1-33	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-33	YES
	Claims		NO

2. Citations and explanations

Document US-A-6 257 011 (D1) describes a wearable cooling device, in particular a personal cooling apparatus, with a small-scale casing (30) having a casing section containing a latent heat accumulator (60; see figures 3 and 5 and column 5, lines 60-67), said casing being provided with an intake (16, see figure 3) for a heat-exchanging gaseous medium (air) to be conducted past the latent heat accumulator and with an outlet (32; see figure 3) for releasing the cooled medium, and having a conveying means (65), which can be operated by an energy supply (batteries; see column 6, lines 18-22) provided in the casing, for conveying said medium for the self-sufficient operation of the cooling device.

A similar cooling device having these features is also known *inter alia* from document FR-A-2679017 (D2).

The invention according to claim 1 differs in that, at a position located downstream from the latent heat accumulator, a flap-like actuator (17) is provided by means of which it is possible to vary the degree of opening of a first medium channel (6), which conducts said medium past the latent heat accumulator (4), and of a second medium channel (18), which does not conduct the

medium that is fed into the casing (2) past the latent heat accumulator.

This embodiment permits the mixing of cooled and uncooled medium. In this way, the user can regulate the temperature. An embodiment such as this with an actuator is not described by the available prior art nor can it be derived without exercising inventive skill. By contrast, the available documents show only a single medium channel.

Therefore, the novelty and the inventive step of claim 1 is acknowledged, and claim 1 satisfies the requirements of PCT Article 33.

The novelty, inventive step and industrial applicability of claims 2 to 30, which contain other developments of claim 1, are established by their dependence upon claim 1. Claims 31 and 32 relate to a cooling system comprising a cooling device according to one of claims 1 to 30. Claims 31 and 32 thus contain all of the features of claim 1 and therefore also satisfy the requirements of PCT Article 33. Claim 33 relates to a method for cooling a person which also employs a cooling device according to one of claims 1 to 30. Therefore, claim 33 likewise satisfies the requirements of PCT Article 33.